



SHILAP Revista de Lepidopterología

ISSN: 0300-5267

ISSN: 2340-4078

avives@orange.es

Sociedad Hispano-Luso-Americana de Lepidopterología  
España

Ustjuzhanin, P. Ya.; Dubatolov, V. V.; Streltzov, A. N.  
Pterophoridae of the Great Ussuri Island (Khabarovsk suburbs), Russia (Lepidoptera: Pterophoroidea)  
SHILAP Revista de Lepidopterología, vol. 48, no. 189, 2020, -March, pp. 27-30  
Sociedad Hispano-Luso-Americana de Lepidopterología  
España

Available in: <https://www.redalyc.org/articulo.oa?id=45562768002>

- How to cite
- Complete issue
- More information about this article
- Journal's webpage in redalyc.org

redalyc.org  
UAEM

Scientific Information System Redalyc  
Network of Scientific Journals from Latin America and the Caribbean, Spain and  
Portugal  
Project academic non-profit, developed under the open access initiative

# Pterophoridae of the Great Ussuri Island (Khabarovsk suburbs), Russia (Lepidoptera: Pterophoroidea)

P. Ya. Ustjuzhanin, V. V. Dubatolov & A. N. Streltzov

## Abstract

12 Pterophoridae species are recorded from the Great Ussuri Island in the Ussuri delta (Khabarovsk suburbs); most of them prefer mesophytous meadows. Two species, *Agdistis adactyla* (Hübner, [1823]) and *Hellinsia inulae* (Zeller, 1852) prefer dryer localities and are not known east from Khabarovsk.

KEY WORDS: Lepidoptera, Pterophoroidea, Pterophoridae, new data, Khabarovsk region, Russia.

**Pterophoridae de la Gran Isla Bolshoy Ussuriysky (suburbios de Khabarovsk), Rusia**  
(Lepidoptera: Pterophoroidea)

## Resumen

Se registran 12 especies de Pterophoridae de la Gran Isla Bolshoy Ussuriysky (suburbios de Khabarovsk), en el delta del Ussuri; la mayoría de ellos prefieren praderas mesófitas. Dos especies, *Agdistis adactyla* (Hübner, [1823]) y *Hellinsia inulae* (Zeller, 1852) prefieren localidades secas y no eran conocidas del este de Khabarovsk.

PALABRAS CLAVE: Lepidoptera, Pterophoroidea, Pterophoridae, nuevos datos, Khabarovsk, Rusia.

## Introduction

The Great Ussuri Island is located in the river Ussuri delta between the river Amur and the river duct formed by the confluence of the river Ussuri and Kazakevichevo branch of the river Amur. The western part (about 1/3) of this island is now a territory of China (named Héixīzì Dao), the other part is Russian territory. Different types of meadows from wet flood to xerophytous ones cover the island. Forests (*Salix* sp., *Alnus glutinosa* (L.) Gertn., *Populus* sp., *Quercus* sp., *Ulmus* sp., *Maackia* sp., *Crataegus monogyna* Jacq., *Prunus padus* L.) are scarce and form narrow bands, named "ryolka". There are several small lakes, narrow river branches and artificial ditches across the island. This island is located a few kilometers to south from Great Khekhtsy Nature Reserve.

The lepidopteran fauna of the Great Ussuri Island is poorly known. Butterflies were well studied by E. Novomodnyi: KOSHKIN & NOVOMODNYI (2008). The second author, V. Dubatolov, searched moths in different landscapes of the island in 2012-2014, and 2016 using light traps DUBATOLOV (2012). The most interesting records of macromoths were published in different articles concerning Macroheterocera of the Great Khekhtsy Nature Reserve: DUBATOLOV *et al.* (2013, 2014); VASILENKO *et al.* (2014). Most surprising was discovering the species that prefer South Siberian steppes and xerophytous meadows, like *Eogystia sibirica* (Alpheráky, 1895) (Cossidae), *Mythimna albiradiosa* (Eversmann, 1852) (Noctuidae), and some micros, like *Elethyia taishanensis* (Caradja,

1937) (Crambidae); these findings were first for the Khabarovsk Province. The present article contains information about plume-moths of the Great Ussuri Island.

Five species of casebearer moths (Coleophoridae) from the Great Ussuri Island were noted for the first time in the Far East and one species (*Casignetella graminicolella* Heinemann, 1876) - in the Asian part of Russia (ANIKIN, 2015).

### List of collecting localities

GUI-1: 48° 24.33' N, 134° 53' E, mesophytous meadow with solitary willow bushes, one side is fringed by reeds.

GUI-1-5: 48° 23.56' N, 134° 52.65' E, mesophytous meadow with single willow bushes.

GUI-2: 48° 23.35' N, 134° 52.38' E, xerophytous meadow with scarce poplars, along the road on embankment.

GUI-3: 48° 22.59' N, 134° 50.48' E, mesophytous meadow at the border between willow bushes and meadow with reeds.

GUI-4: 48° 22.215' N, 134° 49.41' E, xerophytous meadow with scarce poplars, along the road on embankment.

GUI-5: 48° 21.845' N, 134° 48.58' E, forest edge near a wide mesophytous meadow.

ryolka: 48° 24.78' N, 134° 53.56' E, open forest edge near a wide mesophytous meadow.

### An annotated list of Pterophoridae of the Great Ussuri island (Khabarovsk suburbs)

#### *Agdistis adactyla* (Hübner, [1823])

Material: 1 ♀, 23-24-VII-2012, GUI-1; 1 specimen, 28-29-VII-2016, GUI-1-5.

Distribution: Temperate belt of the Palearctic.

#### *Gillmeria pallidactyla* (Haworth, 1811)

Material: 4 specimens, 2-3-VII-2013, GUI-1.

Distribution: Temperate belt of the Palearctic, North America.

#### *Cnaemidophorus rhododactylus* ([Denis et Schiffermüller], 1775)

Material: 1 ♂, 2-3-VII-2013, GUI-5.

Distribution: Temperate belt of the Palearctic, North America.

#### *Capperia (?) jozana* (Matsumura, 1931)

Material: 1 ♀, 18-19-VI-2012, GUI-3; 1 ♂, 28-29-VIII-2012, GUI-1; 1 ♂, 2-3-VII-2013, GUI-4; 1 ♀, 15-16-VIII-2016, "ryolka".

Distribution: Southern regions of the Russian Far East (?); Japan.

Remarks: Status of the species is dubious. Morphological distinguishing characters from *C. trichodactyla* ([Denis et Schiffermüller], 1775) are insignificant. Additional investigations are needed to resolve taxonomic problems in the species group "trichodactyla", including DNA comparison.

#### *Fuscoptilia emarginata* (Snellen, 1884)

Material: 2 specimens, 5-6-VIII-2013, GUI-4; 5 specimens, 28-29-VII-2016, GUI-1-5; 2 ♂♂, 15-16-VIII-2016, "ryolka".

Distribution: Baikal Region, Transbaikalia, southern regions of the Russian Far East; Mongolia, China, Korea, Japan.

#### *Oidaematophorus iwatensis* (Matsumura, 1931)

Material: 1 ♂, 1 specimen 4-5-VII-2012, GUI-1.

Distribution: Southern regions of the Russian Far East; North-Eastern China (Dunbei, or Manchuria), Japan.

*Hellinsia albidactyla* (Yano, 1963)

Material: 2 ♀♀, 18-19-VI-2012, GUI-3; 1 ♂, 8-9-VI-2013, GUI-5; 1 ♂, 19-20-VII-2016, GUI-1; 1 ♂, 15-16-VIII-2016, "ryolka".

Distribution: Southern regions of the Russian Far East; China, Korea, Japan.

*Hellinsia didactylites* (Strom, 1783)

Material: 2 ♂♂, 23-24-VII-2012, GUI-1; 1 ♂, 28-29-VII-2016, "ryolka".

Distribution: Europe, the Caucasus, Kazakhstan, Middle Asia, Siberia, southern regions of the Russian Far East; North China (Shaanxi, Jilin).

*Hellinsia inulae* (Zeller, 1852)

Material: 4 ♂♂, 2 ♀♀, 2-3-VII-2012, GUI-2; 2 ♂♂, 18-19-VI-2012, GUI-1; 1 ♂, 7-8-VIII-2012, GUI-1; 17 specimens, 28-29-VIII-2012, GUI-1; 1 ♂, 2-3-VII-2013, GUI-5.

Distribution: North Africa, Europe, Kazakhstan, Middle Asia, South Siberia, southern regions of the Russian Far East; Mongolia, China (Xinjiang, Shandong).

*Hellinsia lienigiana* (Zeller, 1852)

Material: 1 ♂, 7-8-VIII-2012, GUI-1; 1 ♂, 8-9-VI-2013, GUI-5; 1 ♂, 1 ♀, 5-6-VIII-2013, GUI-4.

Distribution: North Africa, Europe, Transcaucasia (Armenia), Iran, India, South Siberia, southern regions of the Russian Far East; China (Shaanxi, Zhejiang, Fujian, Jiangxi, Shandong, Hunan, Guizhou, Taiwan), Korea, Japan, New Guinea, North and Central America.

*Hellinsia nigridactyla* (Yano, 1961)

Material: 1 ♂, 18-19.vi.2012, GUI-3; 5 ♂♂, 4 ♀♀, 15-16-VIII-2016, "ryolka"; 1 ♂, 2-3-VII-2013, GUI-5; 1 specimen, 5-6-VIII-2013, GUI-5.

Distribution: Eastern Transbaikalia, southern regions of the Russian Far East; China, Japan.

*Emmelia argoteles* (Meyrick, 1922)

Material: 1 ♂, 1 ♀, 19-20-VII-2016, GUI-1; 32 specimens, 28-29-VII-2016, "ryolka".

Distribution: Transbaikalia, southern regions of the Russian Far East; China, Japan.

## Conclusion

12 Pterophoridae species have been found in the Great Ussuri Island; but this number is not probably full. At least, 21 Pterophoridae species are known to occur in the Great Khekhtsy Nature Reserve (a few km south from the Great Ussuri Island), 18 of them were mentioned by USTJUZHANIN & KOVTUNOVICH (2007), and 3 species were collected later: *Gillmeria stenoptilooides* (Filipjev, 1927), *Hellinsia distincta* (Herrick-Schäffer, 1855) (SE angle of the Nature Reserve and the neighbouring bog), *H. nigridactyla* (river Chirki valley). One species from the Great Ussuri Island, *H. albidactyla* is still not known from the Great Khekhtsy Nature Reserve.

In general, the most part of the Pterophoridae species from the Great Ussuri Island prefers mesophytous meadows. Only few of them prefer open xerophytous biotopes, like *Agdistis adactyla*, *Hellinsia inulae*; they are not known in more eastern places.

## Acknowledgments

The authors are grateful to Mr. V. Platisyn for his assistance in setting light traps in Great Ussuri Island in 2012-2014. The investigation of the moths fauna in 2016 was made as a part of work on organizing the protected territory for serving Divina's Blue, *Schijimiaeoides divina* (Fixsen, 1887) in the eastern part of the Great Ussuri Island realized by "Zapovednoe Priamur'e".

## BIBLIOGRAPHY

- ANIKIN, V. V., 2015.– To the casebearer (Lepidoptera, Coleophoridae) moths fauna of Priamurie.– *Amurian Zoological Journal*, **7**(1): 51-54. (in Russian).
- DUBATOLOV, V. V., 2012.– Light trap usage for moth population studies (Insecta, Lepidoptera).– *Euroasian Entomological Journal*, **11**(2): 186-188. (in Russian).
- DUBATOLOV, V. V., DOLGIKH, A. M. & PLATITSYN, V. S., 2013.– New findings of macromoths (Insecta, Lepidoptera, Macroheterocera) in the Nature Reserve Bolshekhekhtsyrskii in 2012.– *Amurian Zoological Journal*, **5**(2): 166-175, pl. III-V. (in Russian).
- DUBATOLOV, V. V., DOLGIKH, A. M. & PLATITSYN, V. S., 2014.– *Neothosea suigensis* (Limacodidae), *Catocala musmi* (Noctuidae) and other new findings of macromoths (Insecta, Lepidoptera, Macroheterocera) in the Bolshekhekhtsyrskii Nature Reserve and its environs in 2013.– *Amurian Zoological Journal*, **6**(1): 77-80, pl. IV. (in Russian).
- KOSHKIN, E. S., & NOVOMODNYI, E. V., 2008.– Fauna of the butterflies (Lepidoptera, Diurna) of the Khabarovsk city and its vicinities.– *A. I. Kurentsov's Annual Memorial Meetings*, **19**: 66-83. (in Russian).
- USTJUZHANIN, P. YA. & KOVTUNOVICH, V. N., 2007.– Plume and many-plume moths (Lepidoptera, Pterophoridae, Alucitidae) of the Bolshekhekhtsyrskii Nature Reserve (Khabarovsk suburbs).– *Zhivotnyi mir Dal'nego Vostoka*, **6**: 92-94. (In Russian).
- VASILENKO, S. V., BELJAEV, E. A., DUBATOLOV, V. V. & DOLGIKH, A. M., 2014.– Interesting records of the geometrid moths (Lepidoptera, Geometridae) in the Bolshekhekhtsyrskii Nature Reserve and on Bolshoi Ussuriysky Island (vicinity of Khabarovsk).– *Amurian Zoological Journal*, **6**(3): 265-270. (in Russian).

\*P. U.

Altai State University  
Lenina, 61  
RUS-656049 Barnaul  
RUSIA / RUSSIA  
E-mail: petrurst@mail.ru  
<https://orcid.org/0000-0002-5222-2241>

y / and

Biological Institute  
Tomsk State University  
Lenina Prospekt, 36  
RUS-634050 Tomsk  
RUSIA / RUSSIA

V. D.

Federal State Institution “Zapovednoe Priamurye”  
Bychikha village  
Yubileinaya street, 8  
RUS-680502- Khabarovskii Raion, Khabarovskii Krai  
RUSIA / RUSSIA  
E-mail: vvdubat@mail.ru  
<https://orcid.org/0000-0001-7687-2101>

y / and

Institute of Systematics and Ecology of Animals  
Siberian Branch of Russian Academy of Sciences  
Frunze str.,11  
RUS-630091 Novosibirsk  
RUSIA / RUSSIA

A. S.

Herzen State Pedagogical University of Russia  
Moika Emb., 48  
RUS-191186 Saint-Petersburg  
RUSIA / RUSSIA  
E-mail: streltzov@mail.ru  
<https://orcid.org/0000-0002-5658-8515> 0

\*Autor para la correspondencia / Corresponding author

(Recibido para publicación / Received for publication 24-IX-2019)  
(Revisado y aceptado / Revised and accepted 29-IX-2019)  
(Publicado / Published 30-III-2020)